

SLI Compliance Engineering Change Evaluation and Review Form

Vendor:	Hart InterCivic	Date:	8/31/2022
Change ID:	ECO-01553	System(s):	Verity 2.7
Product:	New Source for 3.3V Power Regulator on Verity Baseboard		

Change Summary Description	
<p>Summary Description: ECO-01553 revisions the Verity device baseboards introduced in Verity 2.7 to change the supplier of a power regulator. The baseboards are updated to change the Texas Instruments power regulator (TPS563249DDCR) to the Diodes Inc. power regulator (AP62200WU-7) due to much greater availability of the Diodes Inc. part.</p> <p>Reason for Change: This ECO is necessary due to the low availability of the Texas Instruments part, which has substantially increased in market price.</p> <p>ECO Category: Preferred</p>	
Reference Documents:	
<ul style="list-style-type: none"> EAC 2005 Voluntary Voting System Guidelines (VVSG) Volume II, Sec. 1 & 4. EAC Voting System Testing and Certification Program Manual Version 3.0, Sec. 3.5.1. 	
Documentation used in SLI's Assessment:	
<p>ECO-01553 Summary - New source for 3.3V Power Regulator on Verity baseboards 4005810 A00. 4005810A_Supporting_Documents:</p> <ul style="list-style-type: none"> AMLs BOMs Datasheets EMC Test Report - ECO-01553 EMC Test Report 4005812 A00 EVT Test Report – Sinatra Baseboard Design Alternative 3.3V Regulator IC EVT 4005811 A00 Schematics 	
Change Evaluation	Comments
<input type="checkbox"/> The change affects the form, fit or function of the equipment and therefore requires hardware testing to be performed. The testing requirements are defined in the Hardware Test Matrix table below. Any changes made to a system under test will result in the manufacturer supplying a list and detailed description of all changes.	N/A
<input checked="" type="checkbox"/> Minor change order: A minor change order is a change to a certified voting system's hardware, software, Technical Data Package (TDP), or data, the nature of which will not materially alter the system's reliability, functionality, capability, or operation.	This change request does not materially alter the system's reliability, functionality, capability, or operation of the certified devices.
<input checked="" type="checkbox"/> System documentation: The manufacturer has provided a description of how this change will impact any relevant system documentation and has provided the updated documentation, if applicable.	Updates will not go into effect until after the EAC ruling.



Summary Comments

The modification described on this ECO affects the baseboards on the modified Verity devices introduced in Verity Voting 2.7 only. No changes to the circuit board layout are necessary for this change, only component values. There are no changes to software or firmware.

Electromagnetic Compatibility (EMC) testing was performed on the Verity Controller and Verity Touch Writer Duo devices in a daisy-chain configuration. Test results shows all tests passed successfully without issue.

Electrical Verification Test at the component level indicates no performance or functional degradation of the power regulator on the Verity 2.7 baseboard.

Hart internal QA testing performed on the Verity Controller and Verity Touch Writer Duo devices in a daisy-chain configuration encountered no issues during testing.

As required under section 3.5.1 of the EAC's Voting System Testing and Certification Program Manual Version 3.0, SLI considers the nature of ECO-01553 to be minor change and therefore not to affect the Federal certification status for Hart Verity 2.7 Voting System.

	Approved by/Title	Signature:	Date:
	Darrick Forester Hardware Test Engineer		8/31/2022
	Traci Mapps Vice President, SLI Compliance		8/31/2022